

Name \_\_\_\_\_  
Period \_\_\_\_\_ Date \_\_\_\_\_

## Worksheet: Reaction Rates

Giv

1. A study of reaction \_\_\_\_\_ is called chemical kinetics.
2. Reaction rate refers to how quickly or slowly the \_\_\_\_\_ disappear and the \_\_\_\_\_ appear.
3. If a reaction is to occur, reacting particles must first \_\_\_\_\_.
4. What are the FOUR major factors that affect reaction rate?
5. Why would a mixture of gases react faster when the volume they occupy is decreased?
6. Why would iron shavings rust faster than an iron nail?
7. What is the effect of a catalyst on the required energy to achieve effective collisions?
8. Molds and bacteria that spoil food. Explain, using your knowledge of factors affecting the rate of reaction, why food doesn't spoil as fast when it is refrigerated as it would at room temperature.
9. Due to decomposition reactions with oxygen or carbon dioxide in the air, meat begins to feel slimy and smell spoiled. Explain, using your knowledge of chemical kinetics, why meat spoils less rapidly when left unsliced.
10. Based on your knowledge of factors affecting the rate of reaction, why is there a danger of explosions in places such as silos and coal mines where there are large quantities of powdered, combustible materials? (watch youtube video on progressbook)

Rea

Proce